CORRESPONDENCE/MEMORANDUM

DATE: June 5, 2001 FILE REF: 4561

TO: Natural Resources Board

FROM: Darrell Bazzell – AD/5

SUBJECT: Recommendation to Authorize Public Hearings for Proposed Mercury Emission Rules

Why is the rule being proposed?

In December 2000, the Board adopted a resolution that granted a citizen petition seeking rulemaking to reduce mercury emissions to the air. The Board directed staff to develop proposed rules that protect public health and the environment, and are also cost-effective, reasonable, and do not interfere with the ability of electric utilities to supply the state's energy needs. Under the authority of s. 285.11(9), Wis. Stats., proposed administrative rules have been developed to reduce mercury emissions.

The Department believes that emissions of mercury from fossil fuel-fired boilers used to generate electricity and from other major sources significantly contribute to mercury entering water bodies and ultimately fish and wildlife. Furthermore, atmospheric mercury deposition has contaminated nearly all of the state's water bodies to some level resulting in a statewide fish consumption advisory that was adopted at the February 2001 Natural Resources Board meeting. The resolution adopted by the Board in December 2000 requires the proposed administrative rules to include the following:

1. The percentage reductions in mercury emissions and a phased schedule for achieving the reductions.
2. A methodology for determining baseline emissions levels.
3. An emissions trading and banking system.
4. A provision to allow for alternative compliance options, such as relying on projects that achieve voluntary mercury emission reductions from sources not covered by the rules.
5. A provision that would allow the Department to grant variances, such as deadline extensions and alternative emission limits, if it determines that compliance with reduction requirements is not technologically feasible, would jeopardize electric reliability or would cause unreasonable hardship as long as the variance would not result in undue harm to human health or the environment.
6. A provision that the Department submit a report to the Board by the end of 2007 that:
   a. Evaluates the mercury reduction requirement in light of electric reliability, scientific and technological developments, and federal regulatory activity, and recommends adjustments to the reduction requirements, if appropriate.
   b. Assesses the impacts of emissions trading on localized water quality and recommends corrective actions if needed.

Summary of the Rule

The proposed rules contain a phased mercury reduction schedule for four major electric utilities covering a fifteen-year period. Five years after promulgation, a 30% reduction in baseline mercury emissions must be achieved by each major utility. A 50% reduction in baseline emissions is required after ten years, and a final reduction of 90% is to be achieved after fifteen years.

Evaluation reports are proposed at six years and eleven years after rule promulgation. These reports would examine critical rule implementation issues and evaluate the technical and economic feasibility of achieving the ten-year and fifteen-year mercury reduction levels. Each report would require recommendations to the Board for rule revisions necessary to implement report findings including modifications to the ten-year and fifteen-year mercury reduction levels.

In addition to the evaluation reports, the Department would also review the consistency of state rule requirements with any newly proposed federal regulations that impact sources covered in the state rule. According to the proposed rules, this evaluation must be completed within six months of federal rule proposal and will include preliminary recommendations to the Board for rule revisions or other actions necessary to implement the findings of these federal rule evaluations. Final recommendations to the Board would occur within six months of federal rule promulgation.

The evaluation reports and federal rule consistency reports will allow the Department to recommend changes to the implementation of the state mercury reduction program based on up-to-date technical, economic and environmental information.

In addition to the emission reductions by large electric utilities, the proposed rules include an emissions ceiling on mercury emissions for other utilities and major stationary sources that annually emit 10 pounds of mercury or more. The rule requires that a mercury emission cap be established for such sources. These sources include industrial boilers, waste incinerators and chlor-alkali plants. After the effective date of the rule, stationary sources that subsequently have mercury emissions of 10 pounds or more would become subject to an emission ceiling and need to determine baseline emissions.

A ceiling on mercury emissions would take effect four years after rule promulgation. From this point on, emission offsets for increased emissions from new or modified sources that exceed 10 pounds annually are required. An offset ratio of 1.5 to 1.0 for mercury emissions is being proposed. This would require the elimination of 1.5 pounds of mercury emissions from an existing source for every 1.0 pound of increased mercury emissions from the new or modified source.

Major utilities and stationary sources of mercury will need to establish baseline emissions. Baseline emissions are the average annual mercury emissions over a three-year period, 1998 through 2000. An alternative baseline can be requested if this period of time is determined not to be representative. Adjustments will be required for any period of noncompliance that affects mercury emissions during the three-year period used to determine baseline emissions.

Within two years of rule promulgation, source owners and operators are required to provide information on their baseline emissions to the Department. The Department has one year after submittal for a review and determination of the source's baseline emissions. The proposed rule contains acceptable procedures for determining annual mercury emissions for utility boilers and other major stationary sources for the purpose of establishing baseline emissions. The Department's determination of baseline emissions establishes a mercury emission ceiling for affected major stationary sources and major utilities.

Compliance Alternatives

Compliance with requirements in the proposed rule can be achieved through the application of control technology and by securing certified emission reduction credits created by a pollution reduction project or

mercury-containing products reduction project. A combination of both approaches is also acceptable. The creation and use of certified emission reduction credits is outlined in the proposed rule.

Major utilities may achieve compliance with the emissions ceiling, emissions offset or phased mercury reduction requirements proposed in the rule through a corporate emission averaging approach. This means that a major utility or facility can aggregate mercury emissions from all stationary sources under common ownership or control to demonstrate compliance with requirements proposed in the rule.

Certified Emission Reductions

The proposed rule establishes requirements that govern the creation and use of Department certified emission reductions. These mercury emission reductions would be available to achieve compliance with the emissions ceiling, emissions offset or phased reduction requirements in the proposed rule.

A fundamental requirement for Department certification of emission reductions is that the reduction must be created through either a pollution reduction project or mercury-containing products reduction project, as defined in the rule. Certification of emission reductions from pollution reduction projects will not be considered if the emission reductions are not the result of a specific action, such as the installation or modification of a pollution control system, process change, or product reformulation. The Department would also not certify mercury emission reductions that are already required by another local, state or federal law or regulation.

Mercury-Containing Products Reduction Projects

The proposed rule encourages the establishment of mercury-containing products reduction projects. Emission reductions from these projects may be certified and made available for compliance with rule requirements. The proposed rule recognizes that there is uncertainty in determining the effectiveness of these projects. Provisions have been set that will establish the expected mercury reduction level from these projects, so that there is certainty in the amount of certified emissions that are available. There will also be requirements to insure that mercury recovered from these projects is properly handled, stored and disposed of to prevent reemission.

Certified Emission Reduction Registry

Beginning three years after promulgation, the proposed rule requires the Department to establish a certified emission reduction registry. The registry would contain information on the availability and use of certified mercury emission reductions. The Department would be required to perform periodic registry updates and prepare periodic reports on mercury registry activity.

Compliance

The proposed rule outlines the compliance determination requirements for affected stationary sources and major utilities. This includes emissions testing, fuel testing, reporting, and other requirements.

Compliance plans from the major utilities are proposed to begin in the fourth year after promulgation. The mercury compliance plan would have the same submittal date and review schedule as the sulfur dioxide compliance plan required in the state acid deposition law, s. 285.41, Wis. Stats.

Electric Reliability

The variance provisions in the proposed rule are based upon the approach and conditions set forth in the state acid deposition law requirements, s. 285.41, Wis. Stats. A variance from a phased emission reduction requirement may be requested.

The variance review process for electric reliability issues is initiated when a major utility submits a request to the Department. The Department will consult with the Public Service Commission (PSC) to determine that a variance condition exists. Variance conditions include, an electrical supply emergency in Wisconsin or elsewhere, a major fuel disruption, an unanticipated disruption in the operation of a fossil-fuel fired unit under the control or ownership of the major utility, the implementation of a pollution reduction project by the major utility to meet the requirements of the rule or any other event deemed to be beyond the control of the major utility that is deemed to make compliance not possible.

The Department will have 90 days from receipt of a completed request to consult with the PSC and perform a review of the alternative compliance proposal provided in the request. The variance request can include an alternative compliance level or schedule, or both. The Department will judge the adequacy of the alternative compliance proposal looking at hardship and impact on human health and the environment.

Evaluation Reports

Six years and eleven years after promulgation evaluation reports will be prepared that will include:

- An evaluation of the mercury reduction requirements taking into consideration electric reliability, scientific and technology developments, costs of control, multi-pollutant reduction approaches and federal regulatory activity.
- An assessment of the impact of emissions trades on local water quality.
- A review of long term mercury storage and disposal practices.
- A recommendation on the feasibility of achieving the major utility mercury reduction requirements.
- Recommendations for corrective actions and rule revisions based on evaluation report findings.

In addition, the Department will evaluate the consistency of state rule requirements with any newly proposed federal regulations that impact sources covered in the state rule. Within six months of federal rule proposal a report with preliminary recommendations is required to be submitted to the Board. Within six months of rule promulgation the consistency evaluation will be updated and a report with final recommendations will be provided to the Board.

Chronology of Key Events in the Proposed Rule

0 Years	Rule promulgation.
2 years	Owners and operators of major utilities and major stationary sources submit a report of their baseline emissions using procedures specified in the rule.
3 years	Certified emission reduction registry is established.
4 years	Annual emissions ceilings become effective. Initial major utility compliance plan due. Emission offsets imposed on new and modified sources with annual mercury emissions greater than 10 pounds.
5 years	First phase reduction for major utilities takes effect.

6 years	1st evaluation report prepared.
10 years	Second phase reduction for major utilities takes effect.
11 years	2nd evaluation report prepared.
15 years	Third and final phase reduction for major utilities takes effect.

How does this proposal effect existing policy?

Existing air management regulations set emission standards for mercury to protect the public from unacceptable mercury exposure due to the direct inhalation of mercury. They do not address the bioaccumulative properties of mercury. Mercury levels in the ambient air are not hazardous to public health in Wisconsin. Rather, the public health risk arises from the mercury that is emitted to the atmosphere and deposited to water bodies where it bioaccumulates in fish that are subsequently eaten. Current state mercury emission standards do not protect public health from the bioaccumulation of mercury in fish.

In 1971, Chapter 272 was enacted by the legislature in response to high mercury levels found in fish in the Wisconsin River. The legislation addressed mercury discharges directly to the water; mercury use and disposal, recordkeeping requirements; and, the requirement that the Department adopt minimum standards for the emission of mercury compounds or metallic mercury into the air (now in s. 285.11(9), Wis. Stats.). In response to the legislation, the Department established emission standards for mercury. At that time, the contribution of atmospheric deposition to elevated mercury levels in fish was not well understood. The Department also adopted the federal NESHAPS (National Emission Standards for Hazardous Air Pollutants) for mercury emissions from chlor-alkali facilities and sludge incineration and drying plants (now in ch. NR 446, Wis. Adm. Code).

In 1988, the Department promulgated ch. NR 445, Wis. Adm. Code, which regulates the emissions of hazardous air contaminants. Mercury is one of the pollutants regulated under ch. NR 445. However, emissions from fossil fuel combustion, including mercury emissions, are exempt from ch. NR 445. A recent re-analysis of the appropriateness of this exemption concluded that emissions from coal combustion were significantly below levels which could pose an inhalation risk to the public, and that the exemption from ch. NR 445 requirements continued to be appropriate.

Has the Board dealt with these issues before?

At the Board meeting in December 2000, the Board adopted a resolution directing staff to draft rules to regulate atmospheric emissions of mercury. The Board instructed the Department to develop proposed rules that protect public health and the environment, but are cost-effective, reasonable, and do not interfere with the utilities' ability to supply the state's energy needs.

Who will be impacted by the proposed rule? How?

The Department will establish baseline mercury emissions for four major electric utilities (those with system-wide annual mercury emissions of 100 pounds or more). These utilities operate a total of thirteen electrical generating stations. For these electric utilities a phased reduction of mercury emissions from an established baseline would be required over a fifteen-year period at five-year intervals. It is anticipated that Alliant Energy, Dairyland Power Cooperative, Wisconsin Electric Power Company, and Wisconsin Public Service Corporation will be the utilities affected by the phased mercury emission reduction requirement. Table 1 contains information about facilities operated by these utilities and estimated annual mercury emissions.

Table 1 - 1999 Mercury Emissions Information for Major Electric Utilities

Facility Name	County	**Mercury Emissions** (pounds per year)
ALLIANT ENERGY – COLUMBIA	COLUMBIA	483
ALLIANT ENERGY – EDGEWATER	SHEBOYGAN	444
ALLIANT ENERGY - NELSON DEWEY	GRANT	52
ALLIANT ENERGY - ROCK RIVER	ROCK	23
DAIRYLAND POWER COOP – ALMA / J.P. MADGETT	BUFFALO	81
DAIRYLAND POWER COOP – GENOA	VERNON	57
WI PUBLIC SERVICE CORP – PULLIAM	BROWN	61
WI PUBLIC SERVICE CORP – WESTON	MARATHON	110
WIS ELECTRIC POWER - OAK CREEK	MILWAUKEE	238
WIS ELECTRIC POWER – PLEASANT PRAIRIE	KENOSHA	618
WIS ELECTRIC POWER – PORT WASHINGTON	OZAUKEE	65
WIS ELECTRIC POWER – VALLEY	MILWAUKEE	45
WIS ELECTRIC POWER – MILWAUKEE COUNTY	MILWAUKEE	5
		2282

Source: Wisconsin Department of Natural Resources, Bureau of Air Management

Table 2 - Major Stationary Sources that Emitted 10 Pounds or More Mercury

Facility Name	**County**	**Category**	**Mercury Emissions** (pounds per year)			
			1997	**1998**	**1999**	**Average**
VULCAN MATERIALS	Wood	Chlor-Alkali	1,092	1,082	1,082	1,085
BARRON CTY WASTE TO ENERGY	Barron	Incinerator	195	187	188	190
APPLETON PAPERS - LOCKS MILL	Outagamie	Incinerator	128	162	129	140
WEYERHAEUSER	Marathon	Boiler	78	64	53	65
DELTA GROUP	Wood	Process	61	59	61	60
CONSOLIDATED PAPERS - KRAFT DIV	Wood	Boiler	44	48	52	48
FORT JAMES	Brown	Boiler	48	47	47	47
UW MADISON – CHARTER ST	Dane	Boiler	37	36	46	40
FRENCH ISLAND RDF BOILERS	Eau Claire	Incinerator	24	24	24	24
MANITOWOC PUBLIC UTILITIES	Manitowoc	Boiler	12	12	10	11
ROCKWELL LIME	Manitowoc	Kiln	13	14	13	13
CONSOLIDATED PAPERS – NIAGARA	Marinette	Boiler	12	14	14	13
Total Emissions			**1744**	**1749**	**1719**	**1736**

Source: Wisconsin Department of Natural Resources, Bureau of Air Management

A ceiling on mercury emissions is also proposed for approximately 12 facilities that have annual mercury emissions of 10 pounds or more. Information about these utilities is presented in Table 2. These 12 facilities will not be required to reduce mercury emissions below their emission ceiling. However, if these facilities wish to increase their mercury emissions the offset process described on page 2 would apply. In addition, these facilities and other smaller sources of mercury air emissions may reduce their emissions voluntarily. Through provisions established in the rule, these voluntary reductions can receive certification by the Department. If certified, these reductions provide an alternative compliance option for facilities to meet requirements in the proposed rule including the utility mercury emission reductions, mercury emission offsets provisions and annual mercury emission ceilings.

In addition, mercury emission offsets would be required for the construction or modification of a stationary source if that would result in annual mercury air emissions of 10 pounds or more.

Environmental Analysis

An environmental assessment was prepared for the proposed rule to meet the Department's responsibilities under s 1.11 Wis. Stats. And Chapter NR 150, Wis. Adm. Code. The attached draft analysis concludes that this proposed regulation is not a major action and therefore an environmental impact statement is not required prior to final action by the Department to adopt this rule.

Small Business Analysis

Small business will not be directly affected by the proposed rules. The requirements in the proposed rule are anticipated to only apply to businesses that are larger in size (i.e. greater than 25 employees or gross annual sales greater than $2,500,000) than small businesses. Small business will be afforded a voluntary opportunity in the proposed rule to create emission reduction credits that could be used to meet rule requirements. It is anticipated that financial assistance and other support would be provided by a major utility or large business to small businesses interested in creating emission reduction credits.

Additional Board Issues

When the Board acted on the resolution in December 2000, the Board identified four specific issues that they asked staff to address when proposed rules were brought back for hearing authorization. These issues are addressed below.

What will the budget impact of the proposed rules be?

If adopted, the air management program plans to implement the proposed rule using existing staff resources. There is a significant workload associated with implementation of the proposed rule. In the first four years after promulgation this would involve determination of baseline emissions for electric utilities and other stationary sources, establishing the certified emission reduction registry and preparation of rule implementation guidance. Throughout the life of the rule, permit staff will need to incorporate rule requirements into operation and construction permits. Ongoing activities include compliance evaluation, maintenance of the emission reduction registry, acting on certified emission reduction requests, variances and preparation of rule evaluation reports.

How will DNR fund continued monitoring of emissions and possible sediment clean up?

The Department is currently operating five mercury wet deposition sites located at Lake Geneva, Devil's Lake, Brule River, Trout Lake, and Popple River. The Brule River, Trout Lake and Popple River sites are in the northern portion of the state, and the Devil's Lake and Lake Geneva sites are in the southern portion of the state. All of the sites are part of the MDN (Mercury Deposition Network) that is a national network collecting data on mercury deposition. The sites collect wet deposition only because early scientific studies have indicated that the majority of mercury that is deposited back to the surface is from precipitation (rain or snow). Recent studies however, suggest that dry deposition may play a more important role. With the exception of the Devil's Lake site, all of the sites collect samples on a weekly basis. The Department's mercury monitoring network is mainly used to determine trends in mercury deposition to the state. Operation of the network is expected to continue dependent on the availability of funding.

The Department is exploring reallocation and alternative funding sources to continue ambient mercury monitoring. The funding source for four of the wet deposition sites will end this fiscal year. Funding for the Devil's Lake monitoring site will expire at the end of December 2002. Annually, approximately $100,000 is needed for site operation and laboratory analyses for these five monitoring stations.

It is not known at this time whether removal of contaminated sediment will have any impact on the formation of methylmercury in water bodies. At the February 2001 Board meeting the research efforts that are underway to further understand methylmercury formation were discussed. The role of mercury contaminated sediment is being evaluated. This research effort, METAALICUS, is a collaboration of many agencies including the Electric Power Research Institute, Environment Canada, USEPA, the U.S. Geological Survey and Wisconsin.

What is the compliance costs for the technologies and techniques required by the proposed rule.

A variety of options are available to achieve reductions in mercury emissions from fossil fuel-fired boilers used to generate electricity. These options include switching from coal to natural gas or other solid fuel with a lower mercury content (e.g. coke, biomass, etc.) and several pre-combustion and post-combustion control technologies.

The majority of the post-combustion technologies center on the absorption of mercury onto a particulate that is then removed by particulate control devices. This removal process already occurs to some extent as mercury has been found to adhere onto exiting flyash and then be captured by the existing particulate control system. Flyash typically contains unburned carbon that can be a very active adsorbent material. In some cases, the removal of mercury can be enhanced with ductwork modifications to increase contact time and mixing with flyash. This is potentially a low cost way to achieve modest increases in mercury reduction.

USEPA in collaboration with the National Energy and Technology Laboratory (NETL) analyzed existing mercury control technologies for electric utility boilers. The NETL determined that a practical approach to achieve significant control of mercury emissions on existing utility boilers is to inject additional adsorbent material, such as activated carbon, into the exhaust gas stream. This increases the mercury to particulate adhesion and absorption interaction and thereby increases the mercury removal efficiency of the existing particulate control systems. The mercury reduction is increased by the injection of more adsorbent material into the flue gas stream. The overall mercury removal efficiency at any one unit is a

function of several parameters including the amount of injected adsorbent, the amount of adsorbent and mercury activity, contact time, and the removal efficiency of the particulate control device.

The NETL analysis developed cost and control information based on the use of commercially available activated carbon as the adsorbent material. The use of activated carbon has several potential impacts including increased maintenance, corrosion/deposition problems, and increased carbon content in the flyash. The most prevalent concern is the impact on flyash as carbon content affects its usability in concrete manufacturing. The NETL information pertinent to Wisconsin utility boilers showed the amount of required activated carbon increases dramatically above a 75% to 80% reduction level at any individual unit. NETL also identified the use of a primarily lime with activated carbon mix instead of carbon alone. This has the potential to reduce cost by 40% and significantly reduces associated carbon impacts. The use of lime and activated carbon as well as other alternative adsorbent materials are currently undergoing development and analysis through pilot projects.

The application of activated carbon injection at a 70% reduction level to one primary unit for each of the four major utilities would achieve an overall 30% reduction in major utility baseline mercury emissions in Wisconsin. Based on the NETL adsorbent information, it is estimated that this reduction level results in additional flyash carbon content of less than 3% for activated carbon adsorbent and 0.3% for the lime/activated carbon mixture for the Wisconsin units. This level of reduction is targeted to minimize the potential impact of carbon use in the system. This first phase reduction of mercury emissions would occur 5 years after the effective date of the rule.

A second installation of adsorbent injection for each of the four major utilities is estimated to yield a 50% reduction in mercury emissions from the major utilities overall baseline emissions. This representation of a second phase would occur 10 years after the rule becomes effective. It is anticipated that the installation of a second adsorbent injection unit to achieve a 50% overall level of reduction would include the primary units for each major utility.

The NETL analysis showed that to achieve very high reduction levels it becomes more cost-effective to install a fabric filter system in lieu of increasing the activated carbon injection rate. A fabric filter system has the potential to remove 90% and upwards of mercury emissions while using significantly less adsorbent material than at the 70% reduction level. This is due to the increased contact by the mercury vapor as it passes through the built up filter cake. Although the fabric filter has a high capital cost it is less on an annualized basis than the additional adsorbent material cost. This approach also has the added benefit of minimizing the potential detrimental impacts of carbon use.

The final reduction phase of 90% reduction at 15 years after rule implementation based on the installation of a fabric filter system after the adsorbent injection at each of the major units. It also assumes some level of adsorbent injection will have to be implemented on some of the smaller units. However, it may not be practical to install this system or achieve this high of a reduction on all units. Therefore this requires reductions greater than 90% on the major units to achieve the overall reduction goal. This higher level of reduction may require the maturation of alternative adsorbents or control technologies to be practical. The installation of a fabric filter system as well as optimizing a system to meet these reduction levels may require extensive engineering and rebuilding of exiting exhaust systems.

The estimated cost of the proposed rule is based on the NETL information applied to the Wisconsin utilities at each of the discussed reduction levels. The control cost assume that carbon impacts are minimized thereby avoiding any land filling cost for flyash. The first phase costs are estimated at 0.02

cents per kilowatt-hour using activated carbon sorbent. For an average household consuming 1000 kilowatt-hour per month this results in an additional cost of $2 per year and annual utility cost of $8 million. The second phase results in a 50% mercury emission reduction with a cost of $4 per year and annual utility cost of $17 million. The final phase, a 90% mercury emission reduction, is estimated to cost $10 per year per household and annual utility cost of $35 million.

Determine the improvement in mercury deposition in Wisconsin expected from the proposed rule.

Mercury exists in the atmosphere in three different forms that have different chemical properties. Depending on its form and prevailing weather conditions, mercury can be deposited locally, regionally or it can circulate in the atmosphere for up to a year and thus be transported thousands of miles from its source. The amount of mercury falling on any one Wisconsin water body is comprised of contributions from the global reservoir, regional sources, and local sources as well as from re-emissions of previously deposited mercury. Based on USEPA studies, the Department estimates that in-state sources may contribute up to 50 percent of the deposition in Wisconsin's water bodies. The Department is cooperating with USEPA in a pilot project at Devil's Lake (near Baraboo) to derive a better estimate of the percentage contribution to mercury deposition from local versus regional emission sources.

Ultimately, regional reductions in mercury emissions will be needed to improve water bodies in the state. However, early action by Wisconsin will likely lessen the time needed for our water bodies to recover. Implementing the electric utility reductions in the proposed rule will result in a reduction of mercury air emissions of 40,000 pounds over a 30-year period, from 2002 to 2032. Early action by Wisconsin is also needed to stimulate actions by other states that may contribute to mercury air deposition in Wisconsin as well as positively influence federal regulatory actions to achieve mercury emission reductions.

Development of Rule Alternatives

Throughout April and May staff have had meetings with key stakeholders to provide a detailed overview of the provisions of the proposed mercury rule being presented for hearing authorization. Significant concerns have been raised as a result of these meetings about several rule provisions including the timing and level of mercury reductions for major utilities, the emission offset requirements for new sources and the content and schedule of periodic rule evaluations. I have asked staff to continue the dialogue with stakeholders. In particular I have requested staff to provide an opportunity for key stakeholders to recommend alternatives they would like the Board to consider incorporating into the public comment process on the proposed rule. These alternatives would focus on the following issues:

- What level of mercury utility emission reductions should be required and on what schedule?
- How should new sources of mercury emissions be addressed?
- What are the appropriate intervals for evaluations of rule provisions and what issues should be addressed?

Prior to the June Board meeting I will provide you with an update on the results of this stakeholder opportunity.